

### **Abstract of the Disclosure:**

**[0083]** Apparatus and surgical methods establish temporary suction attachment to a target site on the surface of a beating heart for analyzing electrical signals or hemodynamic responses to applied signals at the target sites for enhancing the accuracy of placement of cardiac electrodes at selected sites and for enhancing accurate placement of a surgical instrument maintained in alignment with the suction attachment. A suction port on the distal end of a supporting cannula carries surface-contacting electrodes and provides suction attachment to facilitate temporary positioning of the electrodes in contact with tissue at the target site, and a clamping and release mechanism to facilitate anchoring a cardiac electrode on the moving surface of a beating heart at a selected site. Analyses of sensed signals or responses to applied signals at target sites promote epicardial mapping of a patient's heart for determining optimum sites at which to attach cardiac electrodes.